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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,190	08/09/2005	Torsten Muller	B1180/20029	5188

3000 7590 02/07/2008

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ART UNIT	**PAPER NUMBER**
3679	

NOTIFICATION DATE	DELIVERY MODE
02/07/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/509,190	MULLER ET AL.	
	Examiner	Art Unit	
	JAY R. RIPLEY	3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 October 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3 and 5-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3 and 5-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 October 2007* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☒ Other: *Attachments A-C*.

DETAILED ACTION

At the outset, the Examiner notes that the instant Office action is a "Non-Final Office action.

Claims 1-3 and 5-21 are pending. No claims have been withdrawn. Claim 4 has been cancelled.

Drawings

The drawings were received on 10/31/2007. These drawings are not acceptable.

The drawings are objected to because of the improper use of black shading of the liquid lines 10 in Figures 1 and 2. Solid black shading areas are not permitted, except when used to represent bar graphs or color. See 37 CFR 1.84(m).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

In regard to claim 1, there is an inconsistency between the language in the preamble and certain portions in the body of the claim, thereby making the scope of the claim unclear. The preamble in claim 1 clearly indicates that a subcombination is being claimed, e.g., "A coupling device for a liquid-tight coupling of at least one liquid line to a fluidic system". This language would lead the examiner to believe that the Applicant intends to claim only the subcombination of the coupling device, the at least one liquid line and a fluidic system being only functionally recited. This presents no problem as long as the body of the claim also refers to the functionality, such as, "for attachment to said".

The problem arises when the at least one liquid line and a fluidic system are positively recited within the body of the claim, such as "an end of the at least one liquid line being laterally enclosed by the first sealing surface and pointing toward an opening in the external surface" in lines 5-6. The Examiner notes that the "first sealing surface" is part of the positively recited "sealing device" and that the "external surface" is part of the only functionally recited "fluidic system". There is an inconsistency within the claim; the preamble indicates the subcombination of a coupling device is being claimed, while in at least one instance in the body of the claim there is a positive recital of structure indicating that the combination of a coupling device with at least

one liquid line and a fluidic system are being claimed. The examiner cannot be sure if applicant's intent is to claim merely the coupling device or the coupling device in combination with at least one liquid line and a fluidic system.

Applicant is required to clarify what the claims are intended to be drawn to, i.e., either coupling device alone or the combination of the coupling device with at least one liquid line and a fluidic system. Applicant should make the language of the claim consistent with applicant's intent. In formulating a rejection on the merits, the examiner is considering that the claims are drawn to the subcombination and the claims will be rejected accordingly. If applicant indicates by amendment that the combination claim is the intention, the language in the preamble should be made consistent with the language in the body of the claims. If the intent is to claim the subcombination, then the body of the claims must be amended to remove positive recitation of the combination. The Examiner is interpreting the claims such that the subcombination of a coupling device is being positively claimed and the at least one liquid line and a fluidic system are being functionally recited only.

In regard to claim 18, it is recited in lines 1-2, "A method for liquid-tight coupling of at least one liquid line to a fluidic system using a coupling device according to Claim 1". The recitation appears to indicate that the Applicant intends to claim some method of using the coupling device as claimed in claim 1. However, nowhere in the following recitation of the method does the Applicant include the step of providing the coupling of claim 1. Without the step of positively requiring the structure of claim 1, the structure recited in claim 1 would be given little patentable weight, since it has been held that to be entitled to weight in method

claims, the recited structure limitations therein must effect the method in a manipulative sense, and not to amount to a mere claiming of a use of a particular structure. *Ex parte Pfeiffer*, 1962 C.D. 408 (1961).

In regard to claim 19, the recitation in line 1 of "to produce" should be --to form-- to maintain claim language continuity.

In regard to claim 20, the recitation in line 1 of "to produce" should be --to form-- to maintain claim language continuity.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 7, 8, 11, 12, and 14-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regard to claim 7, it is recited in lines 1-2, "wherein the first sealing surface is larger than a cross-sectional area of the end of the at least one liquid line (emphasis added). It appears that the Applicant is attempting to define a structural limitation of a positively recited element, i.e. the first sealing surface, based upon reference to a non-positively recited element, i.e. the functionally claimed at least one liquid line.

In regard to claim 8, it is recited in lines 1-2, "wherein multiple bushings are provided on the at least one sealing device". It is unclear if the recited "multiple bushings" are simply a

multiple of the "bushing" first recited in line 3 of claim 1 or if the "multiple bushings" are bushings in addition to the "bushing" of claim 1. Further confusion is created since claim 8 recites that the "multiple bushings are provided on the at least one sealing device" (emphasis added) while claim 1, line 3, recites "at least one sealing device having at least one bushing" (emphasis added). There is a difference in the meanings of the terms "on" versus "having" that indicates that the Applicants are claiming two distinctly different sets of bushings. Since the original Figures only show one set of bushings, the Examiner interprets the "multiple bushings" of claim 8 to be simply a multiple of the "bushing" recited in claim 1.

In regard to claim 11, it is recited in line 2, "in which hollow plungers". It is unclear if the recited "hollow plungers" in claim 11 are simply a multitude of the "at least one hollow plunger" as recited in claim 1, line 11, or a further structure of "hollow plungers".

In regard to claim 12, it is recited in lines 1-2, "further comprising a holding plate permanently connected with the fluidic system" (emphasis added). It appears that the Applicant is attempting to define a structural limitation of a positively recited element, i.e. the holding plate, based upon reference to a non-positively recited element, i.e. the functionally claimed fluidic system.

In regard to claim 14, it is recited in lines 1-2, "A fluidic system comprising a chip body, to which at least one liquid line is connected by a coupling device according to Claim 1" (emphasis added). It is unclear if the recitation is to indicate that the "at least one liquid line" is connected to the "fluidic system" or the "chip body".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States[D1].

Claims 1-3 and 5-19 rejected under 35 U.S.C. 102(b) as being anticipated by Schick (U.S. 6,267,143).

In regard to claim 1, as best understood, Schick (U.S. 6,267,143) discloses in Figure 3A, see Attachment A, a coupling device comprising:

at least one sealing device having at least one bushing (the bushing shaded in Figure 3A, see Attachment A) adapted to receive an end region of the at least one liquid line (as observed in Figure 3A, see Attachment A) and having a first sealing surface (as observed in Figure 3A, see Attachment A) adapted to contact an external surface of the fluidic system (all of the outer boundary of an object is the "external surface" of the object and the "fluidic system is lightly shaded in Figure 3A, see Attachment A), an end of the at least one liquid line being laterally enclosed by the first sealing surface (the noted "first sealing surface" in Figure 3A, see Attachment A, surrounds an end of the noted "liquid line" and therefore the end is "laterally enclosed") and pointing toward an opening in the external surface (as plainly observed in Figure 3A, see Attachment A, an end of the noted "liquid line" does "point toward" an opening in the external surface of the noted "fluidic system"), and

a clamping device (as observed in figure 3A, see Attachment A) having at least one hollow plunger (as observed in figure 3A, see Attachment A), forming a receptacle for at least a

part of the at least one bushing (as observed in figure 3A, see Attachment A), wherein the clamping device is adapted to press the bushing onto the fluidic system without the clamping device contacting the fluidic system (as plainly observed in Figure 3A, see Attachment A, no contact is mode between the noted "clamping device" and the noted "fluidic system"), so that the first sealing surface produces a liquid-tight connection with the external surface,

wherein the at least one hollow plunger is situated so as to be movable in relation to the external surface (the noted "clamping device", and therefore the noted "hollow plunger", must have been moved to the shown position in Figure 3A in relation to the noted "fluidic system" and as such the "hollow plunger is situated so as to be movable in relation to the external surface"), the at least one bushing has an external shape adapted to interact with an internal shape of the at least one hollow plunger of the clamping device in such a way that a force directed toward the external surface of the fluidic system is exerted on the at least one bushing using the at least one hollow plunger (since the noted "bushing" is interengaged with both the noted "fluidic system" and the noted "clamping device", a force directed toward the external surface of the fluidic system will be exerted on the at least one bushing via the at least one hollow plunger, since the interengagement prevents relative movement), and the at least one bushing has a projection forming the first sealing surface (as noted in Figure 3A, see Attachment A) and an engagement surface for the clamping device (the surface of the noted "bushing" that contacts the noted "hollow plunger").

Note that it has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation, but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138. As such, though

the prior art of Schick discloses the capability to perform the numerous "adapted to" functional recitations in claim 1, the Examiner notes that such specific disclosure is not required for a rejection under 35 U.S.C. § 102. "Adapted to" recitations are found starting in lines 3, 4, 8, and 12 of claim 1; e.g. "adapted to receive an end region of the at least one liquid line" in lines 3-4 of claim 1.

Further note that it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). As such, though the prior art of Schick discloses the intended use of the recitation of "hollow plunger is situated so as to be moveable... surface" (emphasis added) in claim 1, lines 11-12, the Examiner notes that such specific disclosure is not required for a rejection under 35 U.S.C. § 102.

In regard to claim 2, as best understood, Schick further discloses that the hollow plunger is conical in shape (column 7, lines 50-54).

In regard to claim 3, as best understood, Schick further discloses that the bushing has a conical external shape (column 7, lines 50-56).

In regard to claim 5, as best understood, Schick further discloses, as observed in Figure 3A, see Attachment A, that the bushing has an internal hollow channel (that which the liquid line is in), the internal hollow channel forming a second sealing surface (the channel has a surface) and the sealing device being able to be pressed against the end region of the at least one liquid

line using the hollow plunger in such a way that the second sealing surface produces a liquid-tight connection with the surface of the end region.

Note that it has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation, but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138. As such, though the prior art of Schick discloses the functional recitation of "adapted for removably receiving… line" in lines 2-3 of claim 5, the Examiner notes that such specific disclosure is not required for a rejection under 35 U.S.C. § 102.

Further note that it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). As such, though the prior art of Schick discloses the intended use recitation of "sealing device being able to be pressed... region" (emphasis added) in lines 4-6 of claim 5, the Examiner notes that such specific disclosure is not required for a rejection under 35 U.S.C. § 102.

In regard to claim 6, as best understood, Schick further discloses that the internal hollow channel has a cylindrical internal shape (in discussing the embodiment shown in Figure 2, Schick states that the internal hollow channel (11a) is a cylindrical portion (column 4, lines 59-62) and, as there is no statement that the same portion in Figure 3A is a different in shape, the Examiner interprets that the internal hollow channel as shown in Figure 3A, see Attachment A, has a cylindrical internal shape).

In regard to claim 7, as best understood, Schick further discloses in Figure 3A, see Attachment A, that the first sealing surface is larger than a cross-sectional area of the end of the at least one liquid line (as is plainly observed in Figure 3A, see Attachment A, since the liquid line is enclosed by the sealing surface).

In regard to claim 8, as best understood, Schick further discloses in Figure 3A, see Attachment A, multiple bushings provided on the at least one sealing device, the multiple bushings forming at least one sealing unit and being adapted to couple multiple liquid lines to the fluidic system simultaneously.

Note that it has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation, but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138. As such, though the prior art of Schick discloses the functional recitation of "adapted to couple multiple… simultaneously" in lines 3-4 of claim 8, the Examiner notes that such specific disclosure is not required for a rejection under 35 U.S.C. § 102.

In regard to claim 9, as best understood, Schick further discloses that the bushings of the sealing device are connected to one another in a row (three in a row in Figure 3A, see Attachment A).

In regard to claim 10, as best understood, Schick further discloses in Figure 3A, see Attachment A, that the sealing unit forms a sealing mat, from which the bushings project.

In regard to claim 11, as best understood, Schick further discloses in Figure 3A, see Attachment A, that the clamping device comprises a fluidic block, in which hollow plungers are formed in accordance with an arrangement of the bushings of the at least one sealing unit.

In regard to claim 12, as best understood, Schick further discloses in Figure 1, see Attachment B, a holding plate (22) permanently connected with the fluidic system and arranged for positioning the sealing unit on the fluidic system.

Note that it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). As such, though Schick discloses the intended use of the holding plate, Examiner notes that such specific disclosure is not required for a rejection under 35 U.S.C. § 102.

In regard to claim 13, as best understood, Schick further discloses in Figure 1, see Attachment B, that the fluidic block is arranged to be pressed onto the holding plate using a bayonet connector (the structure as disclosed by Schick has an appropriate arrangement to allow the noted "fluidic block" to be pressed onto the holding plate using some bayonet connector, therefore the claim limitations are met).

Note that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ5d 1647 (1987).

In regard to claim 14, as best understood, Schick further discloses that the fluidic system further comprises a chip body (as observed in Figure 1, see Attachment A) that the least one liquid line is connected by a coupling device according to Claim 1 (the invention of Schick is an integral assembly of individual parts; therefore, any connection of one set of parts to one another results in a connection to all of the constituent parts).

In regard to claim 15, as best understood, Schick further discloses that the chip body has an external surface (all three dimensional bodies have an external surface), the external surface being planar at least in some sections (there are plainly observed surfaces that are planar to some plane in Figure 1, see Attachment A) and having at least one opening (noted in Figure 1, see Attachment A) adjoined to a line end of the at least one liquid line (the noted "opening" is observed to be next to an end the noted "liquid line", see Attachment A).

In regard to claim 16, as best understood, Schick further discloses that the line end of the at least one liquid line has a cylindrical external shape (in discussing the embodiment shown in Figure 2, Schick states that the internal hollow channel (11a) is a cylindrical portion (column 4, lines 59-62) and, as there is no statement that the same portion in Figure 3A is a different in shape, the Examiner interprets that the internal hollow channel as shown in Figure 3A, see Attachment A, has a cylindrical internal shape).

In regard to claim 17, as best understood, Schick further discloses that the fluidic system comprises a fluidic microsystem (the prefix "micro" simply means "small" and the term "small" is a relative term; as such any fluidic system can be termed to be a "microsystem" in comparison to a larger fluidic system).

In regard to claim 18, Schick further discloses method for liquid-tight coupling of at least one liquid line to a fluidic system using a coupling device according to Claim 1, the method comprising:

forming a composite (as shown in Figure 1, see Attachment A) of the at least one liquid line with one bushing of the at least one sealing device, respectively, the clamping device, and the fluidic system, and

actuating the clamping device to produce a contact pressure on the projection of the bushing in such a way that the sealing device forms the liquid-tight connection with the external surface of the fluidic system (discussed by Schick column 5, line 53, through column 6, line 6).

Note that any structure recited in claim 1 that does not effect the recited method is given little patentable weight, since it has been held that to be entitled to weight in method claims, the recited structure limitations therein must effect the method in a manipulative sense, and not to amount to a mere claiming of a use of a particular structure. *Ex parte Pfeiffer*, 1962 C.D. 408 (1961).

In regard to claim 19, Schick further discloses a that to produce the composite, the end region of the at least one liquid line is plugged into a bushing of the at least one sealing device, which was previously positioned with the clamping device on the fluidic system, so that the end of the at least one liquid line points toward an opening in the external surface of the fluidic system (discussed by Schick column 5, line 53, through column 6, line 6, and indicated that the fluid line "is plugged into a bushing" after the rest of the constituent components were assembled into a composite in column 6, lines 14-16).

Claims 1, 18 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Johnston et al (U.S. 4,995,646).

In regard to claim 1, Johnston et al disclose a coupling device, the coupling device comprising:

at least one sealing device (as observed in Figure 4, see Attachment C) having at least one bushing (noted in Figure 4, see Attachment C) and having a first sealing surface (noted in Figure 4, see Attachment C), an end of the at least one liquid line being laterally enclosed by the first sealing surface (liquid line 18 has a fixed length and the fixed length consists of two halves; therefore, the Examiner interprets the art shown in Figure 4 such that the indicated "sealing device" is not precisely at the half-way point of line 18 and, therefore, an end of the liquid line 18 is laterally enclosed by the first sealing surface),

a clamping device (noted in Figure 4, see Attachment C) having at least one hollow plunger (noted in Figure 4, see Attachment C) forming a receptacle for at least a part of the at least one bushing (as observed in Figure 4, see Attachment C),

the at least one bushing has an external shape (the bushing is a three dimensional body and therefore the bushing must have some shape), and

the at least one bushing has a projection (noted in Figure 4, see Attachment C) forming the first sealing surface and an engagement surface for the clamping device.

Note that it has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation, but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138. Therefore, the following claim 14 recitations have been given little patentable weight since the positively

claimed structure that the prior art of Johnston et al possesses can be adapted to be used in any structural environment: "adapted to receive an end region of the at least one liquid line" in lines 3-4; "adapted to contact an external surface of the fluidic system" in lines 4-5; "wherein the clamping device is adapted to press the bushing onto the fluidic system without the clamping device contacting the fluidic system, so that the first sealing surface produces a liquid-tight connection with the external surface" in lines 8-10; "adapted to interact with an internal shape of the at least one hollow plunger of the clamping device in such a way that a force directed toward the external surface of the fluidic system is exerted on the at least one bushing using the at least one hollow plunger" in lines 12-15.

Note that it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). Therefore, the following claim 14 recitation has been given little patentable weight since the positively claimed structure that the prior art of Johnston et al possesses can be employed in a structural environment such as recited: "wherein the at least one hollow plunger is situated so as to be movable in relation to the external surface" in lines 11-12. The Examiner notes that the "external surface" is part of the only functionally recited "fluidic system" and therefore may be of any shape or position as desired.

In regard to claim 18, Johnston et al further discloses method for liquid-tight coupling of at least one liquid line to a fluidic system using a coupling device according to Claim 1, the method comprising:

forming a composite (as shown in Figure 4, see Attachment C) of the at least one liquid line with one bushing of the at least one sealing device, respectively, the clamping device, and the fluidic system, and

actuating the clamping device to produce a contact pressure on the projection of the bushing in such a way that the sealing device forms the liquid-tight connection with the external surface of the fluidic system (discussed by Johnston et al in column 3, line 63, through column 4, line 7).

Note that any structure recited in claim 1 that does not effect the recited method is given little patentable weight, since it has been held that to be entitled to weight in method claims, the recited structure limitations therein must effect the method in a manipulative sense, and not to amount to a mere claiming of a use of a particular structure. *Ex parte Pfeiffer*, 1962 C.D. 408 (1961).

In regard to claim 20, Johnston et al further discloses that to produce the composite, the end region of the at least one liquid line is plugged into a bushing of the sealing device, which is subsequently connected to the clamping device and positioned on the fluidic system, so that the end of the at least one liquid line points toward an opening in the external surface of the fluidic system (liquid line 18 has a fixed length and the fixed length consists of two halves, each half constituting an "end"; therefore, the Examiner interprets the art shown in Figure 4 such that the

indicated "sealing device" is not precisely at the half-way point of line 18 and, therefore, an end of the liquid line 18 is laterally enclosed by the first sealing surface: further, Johnston et al discuss assembly of their invention in column 4, lines 49, and indicate that the constituent components may be places in their appropriate positions and then the "tubular members 18 can be passed through the openings", indicating the method recited in claim 20).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schick as applied to claims 1-3 and 5-19 above, and further in view of Leibmann (U.S. 6,077,015).

In regard to claim 21, Schick teaches the claimed invention except for the step of closing a bayonet connector between the clamping device and the fluidic system. Leibmann teaches, in column 1, lines 56-63, that components have been joined together with the use of fasteners in the form of screws, but that bayonet connectors have been utilized to reduce assembly and disassembly time. As Leibmann relates to components joined by fasteners, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the liquid-tight coupling of Schick with bayonet connectors to reduce assembly and disassembly time.

Response to Arguments

Applicant's arguments filed 10/31/2007 have been fully considered but they are not fully persuasive.

Concerning Applicants' arguments with respect to the prior art of Ghosh et al (U.S. 5,9615932) and Fuller (U.S. 2,812,959) have been considered but are moot in view of the new ground(s) of rejection as advanced above. New grounds of rejection were necessitated by the added recitation of "without the clamping device contacting the fluidic system" in claim 1, line 9, and the replace of the limitation of "using" with the limitation of "by" in claim 14, line 2, in the amended claims filed 10/31/2007.

Concerning the Applicants' argument that the prior art of Schick (U.S. 6,267,143) lack a bushing having a projection forming the first sealing surface and an engagement surface for the clamping device in page 7, lines 8-11 of the reply filed 10/31/2007, the argument is not persuasive. As plainly shown in Figure 3A, see Attachment B, Schick shows that the indicated bushing comprises a projection, the projection forming the first sealing surface. The Examiner notes that the noun "projection" can be defined as "a part that extends beyond a prevailing surface". Further, the noted "bushing" has an engagement surface for the clamping device as can also be clearly observed in Figure 3A, see Attachment A. It appears that the Applicants are not reading the limitations in lines 15-16 of claim 1 as they are clearly written. The recitation in claim 1, lines 15-16, is "the at least one **bushing has** a projection forming the first sealing surface and an engagement surface for the clamping device" (emphasis added). The noted recitation has one subject, the "bushing". The verb "has" is applied to the subject noun "bushing", followed by what the "bushing has"; i.e. the bushing has a projection and the bushing

has an engagement surface. If the Applicants intend some other structural limitation to be claimed, the Applicant should amend the claim language to clearly and positively recite what is intended.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAY R. RIPLEY whose telephone number is (571)272-7535. The examiner can normally be reached on 01:00 P.M. - 8:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on 571-272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/J. R. R./
Examiner, Art Unit 3679
31 January 2008

/Daniel P. Stodola/
Supervisory Patent Examiner, Art Unit 3679